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What is claimed is:

1. In a computer system, a method for transferring portions of a memory block comprising the steps of:

3 (a) configuring a first data mover with a first start address corresponding to a first portion of a source memory block;

5 (b) configuring a second data mover with a second start address corresponding to a second portion of the source memory block sized differently from the first portion;

7 (c) transferring, by the first data mover, the first portion of the source memory block; and

9 (d) transferring, by the second data mover, the second portion of the source
10 memory block.

1 2. The method of claim 1 further comprising configuring the first data mover with a first
2 chunk end address corresponding to the first portion of the source memory block.

3 3. The method of claim 2 further comprising generating the first chunk end address.

4 4. The method of claim 1 further comprising configuring the first data mover with a first
2 write address corresponding to a first portion of a first target memory block.

5 5. The method of claim 2 wherein the transferring of the first portion of the source memory
2 block further comprises stopping when the first start address is substantially equivalent to the
3 first chunk end address.

6 6. The method of claim 2 wherein the transferring of the first portion of the source memory
2 block further comprises stopping when the first start address is substantially equivalent to a
3 predefined end address.

1 7. The method of claim 1 further comprising configuring the second data mover with a
2 second chunk end address.

1 8. The method of claim 7 further comprising generating the second chunk end address.

1 9. The method of claim 7 further comprising configuring the second data mover with a
2 second write address corresponding to a second portion of a second target memory block.

1 10. The method of claim 7 wherein the transferring of the second portion of the source
2 memory block further comprises stopping when the second start address is substantially
3 equivalent to the second chunk end address.

1 11. The method of claim 7 wherein the transferring of the second portion of the source
2 memory block further comprises stopping when the second start address is substantially
3 equivalent to a predefined end address.

1 12. The method of claim 1 further comprising configuring the first data mover as a master
2 data mover and the second data mover as a slave data mover.

1 13. The method of claim 12 further comprising communicating, by the master data mover,
2 the first start addresses to the slave data mover.

1 14. The method of claim 4 further comprising transferring the first portion of the source
2 memory block to the first write address corresponding to the first portion of the first target
3 memory block.

1 15. The method of claim 10 further comprising transferring the second portion of the source
2 memory block to the second write address corresponding to the second portion of the second
3 target memory block.

1 16. The method of claim 1 further comprising substantially simultaneously transferring the
2 first portion and the second portion of the source memory block.

1 17. In a computer system, a method for transferring portions of a memory block
2 comprising the steps of:
3 (a) designating a master data mover;
4 (b) designating a slave data mover in communication with the master data mover;
5 (c) transmitting a start address to the master data mover, the start address
6 identifying a first memory portion of a source memory block;
7 (d) transmitting the start address to the slave data mover to enable the slave data
8 mover to determine a next address, the next address identifying a second memory portion
9 of the source memory block sized differently from the first memory portion;
10 (e) transmitting a first write address identifying a first memory portion of a target
11 memory block to the master data mover and a second write address identifying a second
12 memory portion sized differently than the first memory portion of the target memory
13 block to the slave data mover;
14 (f) copying the first memory portion of the source memory block to the first write
15 address identifying the first memory portion of the target memory block; and
16 (g) transferring the second memory portion of the source memory block to the
17 second write address identifying the second memory portion of the target memory block.

1 18. The method of claim 17 further comprising the steps of:
2 (h) verifying that the master data mover is available;
3 (i) transmitting a first end address associated with the first memory portion of the
4 source memory block to the master data mover and a second end address associated with
5 the second memory portion to the slave data mover; and
6 (j) synchronizing the master data mover with the slave data mover.

1 19. The method of claim 17 further comprising the steps of:

2 (h) transmitting a first offset address to the master data mover and a second offset
3 address to the master data mover;

4 (i) obtaining, by the master data mover, a first next address by using the first
5 offset address and the start address;

6 (j) obtaining, by the slave data mover, a second next address by using the second
7 offset address and the start address;

8 (k) stopping the transmitting of the first memory portion of the source memory
block after the first next address is substantially equivalent to the first end address; and

9 (l) stopping the transmitting of the second memory portion of the source memory
block after the second next address is substantially equivalent to the second end address.

10 20. A system to transfer portions of a memory block comprising:

11 (a) a first data mover;

12 (b) a second data mover in communication with the first data mover
over a DM communications bus;

13 (c) a first memory component having a first portion and a second portion
sized differently from the first portion and in communication with the first data mover
and the second data mover over a first DM-memory bus; and

14 a second memory component in communication with the first data mover and the second
data mover over a second DM-memory bus,

15 wherein the first data mover transfers the first memory portion to the second
16 memory component over the first DM-memory bus at a first data transfer rate, and

12 wherein the second data mover transfers the second memory portion to the second
13 memory component over the second DM-memory bus at a second data transfer rate.

1 21. The system of claim 20 wherein the first DM-memory bus is a Peripheral Component
2 Interconnect (PCI) bus and the second DM-memory bus is an Accelerated Graphics Port (AGP)
3 bus.

1 22. The system of claim 20 wherein the first data mover transfers the first memory portion at
2 a substantially simultaneous time as the second data mover transfers the second memory portion.

1 23. The system of claim 20 wherein the first data mover is a first Direct Memory Access
2 (DMA) engine and the second data mover is a second DMA engine.

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